

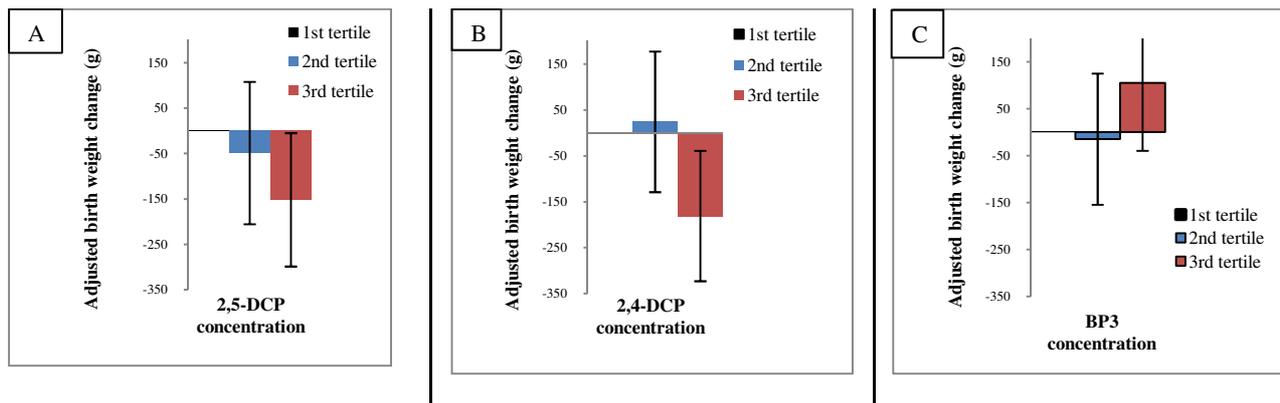
## Supplemental Material

### Exposure to Phthalates and Phenols during Pregnancy and Offspring Size at Birth

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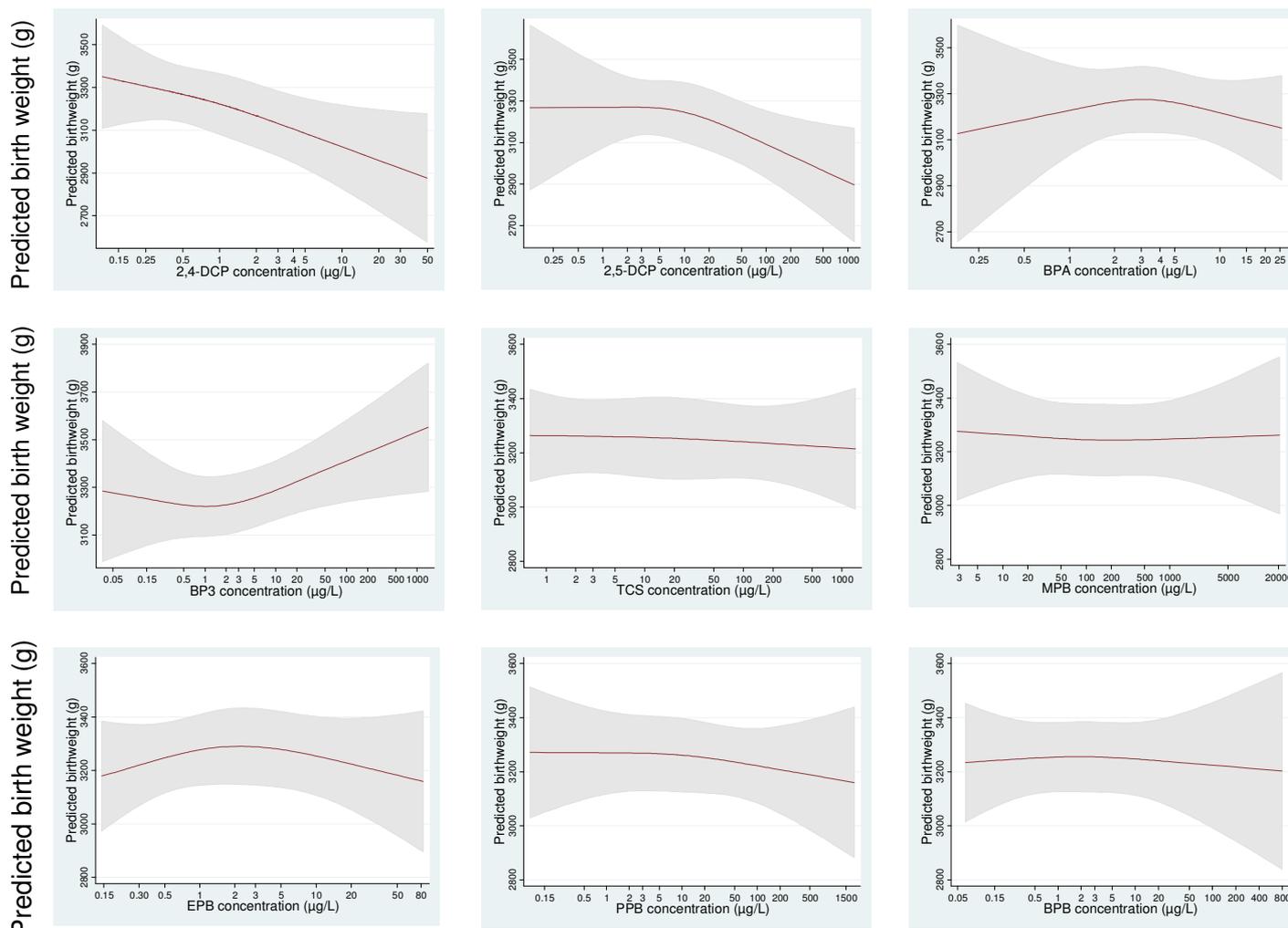


**Supplemental Material, Figure 1:** Adjusted<sup>a</sup> associations between 2,5-DCP (A), 2,4-DCP (B) and BP3 (C) maternal urinary concentrations (tertiles) standardized for sampling conditions, and birthweight (Eden cohort, n = 191).

Abbreviations: 2,4-DCP: 2,4-dichlorophenol, 2,5-DCP: 2,5-dichlorophenol, BP3: benzophenone 3.

<sup>a</sup> Adjusted for gestational duration, maternal pre-pregnancy weight and height, maternal smoking, maternal education level, parity, recruitment center and urine dilution (creatinine level).

Vertical bars indicate 95% confidence intervals.

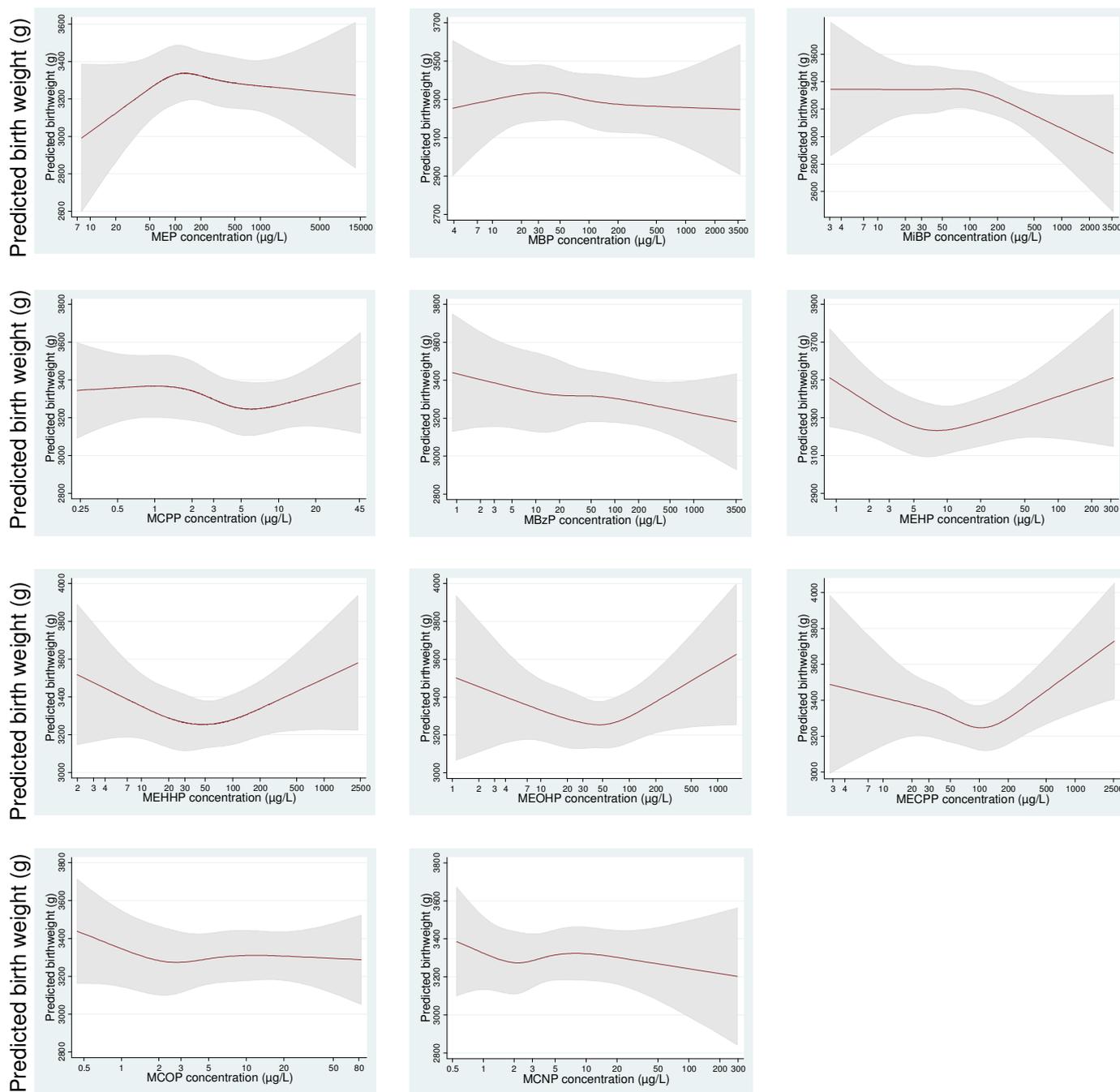


**Supplemental Material, Figure 2:** Birthweight as a function of phenol concentrations standardized for sampling conditions and coded as restricted cubic splines (log scale) (Eden cohort, 2003-2006).

The predicted curves are adjusted for gestational duration, maternal pre-pregnancy weight and height, maternal smoking, maternal education level, parity, recruitment center and creatinine concentration.

Abbreviations: BP: butyl paraben BPA: bisphenol A, BP3: benzophenone 3, MP: methyl paraben, EP: ethyl paraben, PP: propyl paraben, TCS: Triclosan, 2,4-DCP: 2,4-dichlorophenol, 2,5-DCP: 2,5-dichlorophenol.

Shading indicates 95% confidence interval.



**Supplemental Material, Figure 3:** Birthweight as a function of phthalate concentrations standardized for sampling conditions and coded as restricted cubic splines (log scale) (Eden and Pélagie cohorts, 2002-2006).

The predicted curves are adjusted for gestational duration, maternal pre-pregnancy weight and height, maternal smoking, maternal education level, parity, recruitment center and creatinine concentration.

Shading indicates 95% confidence interval.

Abbreviations: MBP: mono-n-butyl phthalate, MBzP: monobenzyl phthalate, MCNP: monocarboxisononyl phthalate, MCOP: monocarboxy-isooctyl phthalate, MCP: mono(3-carboxypropyl) phthalate, MECPP: mono(2-ethyl-5-carboxypentyl) phthalate, MEHP: mono(2-ethylhexyl) phthalate, MEHHP: mono(2-ethyl-5-hydroxyhexyl) phthalate, MEOHP: mono(2-ethyl-5-oxohexyl) phthalate, MEP: monoethyl phthalate, MiBP: mono-isobutyl phthalate.

**Supplemental Material, Table 1:** Sensitivity analyses (phenols) - adjusted changes in weight and head circumference at birth associated with phenols urinary concentrations (Eden cohort, 2003-2006).

Analyte ( $\mu\text{g/L}$ )	Control group only (malformation cases excluded) <sup>a</sup>						Non-standardized biomarker concentrations <sup>b</sup>					
	Change in birthweight			Change in head circumference			Change in birthweight			Change in head circumference		
	$\beta$ (g)	95% CI	p	$\beta$ (cm)	95% CI	p	$\beta$ (g)	95% CI	p	$\beta$ (cm)	95% CI	p
<b>2,4-DCP</b>												
Tertile 1	0	0	0.01 <sup>c</sup>	0	0	0.00 <sup>c</sup>	0	0	0.09 <sup>c</sup>	0	0	0.01 <sup>c</sup>
2	22	[-138; 183]		0.9	[0.4; 1.5]		-61	[-221; 99]		0.4	[-0.1; 0.9]	
3	-196	[-360; -33]		-0.2	[-0.8; 0.4]		-151	[-291; 12]		-0.4	[-1.0; 0.1]	
Ln(2,4-DCP)	-84	[-146; 23]	<0.01 <sup>d</sup>	-0.1	[-0.3; 0.1]	0.03 <sup>d</sup>	-68	[-118; -19]	0.03 <sup>d</sup>	-0.1	[-0.2; 0.1]	0.03 <sup>d</sup>
<b>2,5- DCP</b>												
Tertile 1	0	0	0.12 <sup>c</sup>	0	0	0.32 <sup>c</sup>	0	0	0.34 <sup>c</sup>	0	0	0.20 <sup>c</sup>
2	-56	[-218; 105]		-0.2	[-0.9; 0.4]		32	[-120; 184]		0.1	[-0.5; 0.7]	
3	-172	[-341; 3.8]		-0.5	[-1.1; 0.2]		-73	[-206; 60]		-0.4	[-0.9; 0.2]	
Ln(2,5-DCP)	-57	[-100; 14]	0.05 <sup>d</sup>	-0.1	[-0.2; 0.1]	0.16 <sup>d</sup>	-38	[-71; -4]	0.16 <sup>d</sup>	-0.1	[-0.2; 0.0]	0.08 <sup>d</sup>
<b>BPA</b>												
Tertile 1	0	0	0.09 <sup>c</sup>	0	0	0.11 <sup>c</sup>	0	0	0.39 <sup>c</sup>	0	0	0.12 <sup>c</sup>
2	184	[17; 352]		0.4	[-0.3; 1.0]		101	[-58; 259]		0.3	[-0.3; 0.9]	
3	91	[-91; 274]		0.8	[0.1; 1.4]		21	[-126; 168]		0.6	[0.0; 1.2]	
Ln(BPA)	5	[-96; 105]	0.75 <sup>d</sup>	0.3	[-0.1; 0.7]	0.04 <sup>d</sup>	5	[-80; 90]	0.86 <sup>d</sup>	0.3	[0.0; 0.6]	0.04 <sup>d</sup>
<b>BP3</b>												
Tertile 1	0	0	0.20 <sup>c</sup>	0	0	0.25 <sup>c</sup>	0	0	0.09 <sup>c</sup>	0	0	0.22 <sup>c</sup>
2	-20	[-184; 145]		0.2	[-0.4; 0.8]		-44	[-196; 107]		0.0	[-0.6; 0.6]	
3	117	[-46; 281]		0.5	[-0.1; 1.2]		107	[-31; 246]		0.4	[-0.1; 0.8]	
Ln(BP3)	31	[-5.6; 67]	0.09 <sup>d</sup>	0.1	[0.0; 0.3]	0.10 <sup>d</sup>	35	[7; 63]	0.04 <sup>d</sup>	0.1	[0.0; 0.2]	0.08 <sup>d</sup>
<b>TCS</b>												
Tertile 1	0	0	0.65 <sup>c</sup>	0	0	0.51 <sup>c</sup>	0	0	0.84 <sup>c</sup>	0	0	0.17 <sup>c</sup>
2	-74	[-236; 86]		0.2	[-0.4; 0.8]		-38	[-173; 96]		0.2	[-0.3; 0.7]	
3	-22	[-180; 136]		-0.2	[-0.8; 0.4]		-27	[-159; 106]		-0.3	[-0.8; 0.2]	
Ln(TCS)	-4	[-36; 28]	0.91 <sup>d</sup>	-0.1	[-0.2; 0.1]	0.35 <sup>d</sup>	-9	[-34; 17]	0.86 <sup>d</sup>	-0.1	[-0.2; 0.0]	0.09 <sup>d</sup>
<b>MPB</b>												
Tertile 1	0	0	0.74 <sup>c</sup>	0	0	0.88 <sup>c</sup>	0		0.66 <sup>c</sup>	0	0	0.54 <sup>c</sup>
2	-34	[-194; 124]		0.1	[-0.5; 0.7]		2	[-138; 142]		0.3	[-0.3; 0.8]	
3	27	[-140; 193]		0.2	[-0.5; 0.8]		57	[-79; 193]		0.3	[-0.3; 0.8]	
Ln(MPB)	-1	[-40; 39]	0.58 <sup>d</sup>	0.0	[-0.2; 0.2]	0.67 <sup>d</sup>	5	[-30; 41]	0.36 <sup>d</sup>	0.0	[0.1; 0.2]	0.50 <sup>d</sup>

Supplemental Material, Table 1 (continued)

Analyte ( $\mu\text{g/L}$ )	Control group only (malformation cases excluded) <sup>a</sup>						Non-standardized biomarker concentrations <sup>b</sup>					
	Change in birthweight			Change in head circumference			Change in birthweight			Change in head circumference		
	$\beta$ (g)	95% CI	p	$\beta$ (cm)	95% CI	p	$\beta$ (g)	95% CI	p	$\beta$ (g)	95% CI	p
<b>EPB</b>												
Tertile 1	0	0	0.93 <sup>d</sup>	0	0	0.46 <sup>c</sup>	0	0	0.16 <sup>c</sup>	0	0	0.23 <sup>c</sup>
2	24	[-149; 197]		0.4	[-0.2; 1.0]		134	[-5; 273]		0.5	[-0.1; 1.1]	
3	35	[-147; 216]		0.2	[-0.5; 0.9]		103	[-52; 258]		0.4	[-0.2; 1.0]	
Ln(EPB)	3	[-43; 49]	0.76	0.1	[-0.07; 0.28]	0.98 <sup>d</sup>	6	[-34; 46]	0.55 <sup>d</sup>	0.1	[-0.1; 0.3]	0.54 <sup>d</sup>
<b>PPB</b>												
Tertile 1	0	0	0.98 <sup>d</sup>	0	0	0.48 <sup>c</sup>	0	0	0.89 <sup>c</sup>	0	0	0.78 <sup>c</sup>
2	-3	[-167; 160]		-0.4	[-1.0; 0.3]		-24	[-170; 122]		-0.1	[-0.7; 0.4]	
3	-13	[-179; 150]		-0.3	[-0.9; 0.3]		13	[-124; 149]		-0.2	[-0.7; 0.4]	
Ln(PPB)	38	[-47; 21]	0.86	-0.1	[-0.2; 0.1]	0.57 <sup>d</sup>	-4	[-33; 25]	0.29 <sup>d</sup>	-0.1	[-0.2; 0.1]	0.58 <sup>d</sup>
<b>BPB</b>												
Tertile 1	0	0	0.98 <sup>d</sup>	0	0	0.71 <sup>c</sup>	0	0	0.63 <sup>c</sup>	0	0	0.65 <sup>c</sup>
2	9	[-156; 175]		0.2	[-0.4; 0.8]		37	[-108; 182]		0.1	[-0.4; 0.7]	
3	15	[-159; 190]		0.3	[-0.4; 0.9]		65	[-70; 201]		0.3	[-0.3; 0.8]	
Ln(BPB)	3	[-34; 40]	0.88	0.1	[-0.1; 0.2]	0.58 <sup>d</sup>	9	[-20; 39]	0.41 <sup>d</sup>	0.1	[-0.1; 0.2]	0.41 <sup>d</sup>
<b><math>\Sigma</math>PB</b>												
( $\mu\text{mol/L}$ )												
Tertile 1	0	0	0.95 <sup>d</sup>	0	0	0.89 <sup>c</sup>	0	0	0.72 <sup>c</sup>	0	0	0.67 <sup>c</sup>
2	-18	[-178; 141]		0.1	[-0.5; 0.7]		4	[-131; 139]		0.1	[-0.4; 0.7]	
3	7	[-160; 175]		0.1	[-0.5; 0.8]		53	[-84; 191]		0.3	[-0.3; 0.8]	
Ln( $\Sigma$ PB)	-2	[-42; 38]	0.85	0.0	[-0.2; 0.1]	0.77 <sup>d</sup>	5	[-31; 41]	0.42 <sup>d</sup>	0.0	[-0.1; 0.2]	0.40 <sup>d</sup>

Abbreviations: BPA: bisphenol A, BP3: benzophenone 3, TCS: Triclosan, 2,4-DCP: 2,4-dichlorophenol, 2,5-DCP: 2,5-dichlorophenol, MP: methyl paraben, EP: ethyl paraben, PP: propyl paraben, BP: butyl paraben,  $\Sigma$ PB: molecular sum of parabens. Adjustment factors were maternal pre-pregnancy weight and height, maternal smoking, maternal education level, parity, recruitment center and creatinine level. Models for head circumference were further adjusted for mode of delivery (cesarean section yes/no).

<sup>a</sup> Non-weighted analyses restricted to controls; concentrations were standardized for conditions of sampling; the limits of exposure tertiles were the same as those defined in the whole population (as in table 3), n=143.

<sup>b</sup> Weighted analyses in the whole population, non-standardized concentrations; n=191.

<sup>c</sup> p-values of heterogeneity test.

<sup>d</sup> p-values of monotonic trend test.

Results of the sensitivity analyses for birthlength are available from the corresponding author.

**Supplemental Material, Table 2:** Sensitivity analyses (phthalates) - adjusted changes in weight and head circumference at birth associated with phthalate metabolites urinary concentrations (Eden and Pélagie cohorts, 2002-2006).

Analyte (ug/L)	Control group only (malformation cases excluded) <sup>a</sup>						Non-standardized biomarker concentrations <sup>b</sup>					
	Change in birthweight			Change in head circumference			Change in birthweight			Change in head circumference		
	β (g)	95% CI	p	β (cm)	95% CI	p	β (g)	95% CI	p	β (cm)	95% CI	p
<b>MEP</b>												
Tertile 1	0	0	0.42 <sup>c</sup>	0	0	0.15 <sup>c</sup>	0	0	0.60 <sup>c</sup>	0	0	0.21 <sup>c</sup>
2	78	[-56; 213]		0.3	[-0.2; 0.8]		62	[-72; 196]		0.4	[-0.1; 1.0]	
3	8	[-130; 147]		0.5	[0.0; 1.0]		57	[-80; 195]		0.3	[-0.1; 0.8]	
Ln(MEP)	0	[-54; 54]	0.70 <sup>d</sup>	0.1	[-0.1; 0.3]	0.07 <sup>d</sup>	14	[-39; 67]	0.52 <sup>d</sup>	0.0	[-0.2; 0.2]	0.33 <sup>d</sup>
<b>MBP</b>												
Tertile 1	0	0	0.33 <sup>c</sup>	0	0	0.74 <sup>c</sup>	0	0	0.65 <sup>c</sup>	0	0	0.42 <sup>c</sup>
2	73	[-69; 217]		0.2	[-0.4; 0.7]		36	[-112; 185]		0.1	[-0.3; 0.6]	
3	-16	[-162; 130]		0.2	[-0.3; 0.8]		72	[-81; 225]		0.4	[-0.2; 0.9]	
Ln(MBP)	-8	[-63; 47]	0.40 <sup>d</sup>	0.0	[-0.2; 0.2]	0.50 <sup>d</sup>	6	[-42; 54]	0.37 <sup>d</sup>	0.0	[-0.2; 0.2]	0.19 <sup>d</sup>
<b>MiBP</b>												
Tertile 1	0	0	0.25 <sup>c</sup>	0	0	0.80 <sup>c</sup>	0	0	0.81 <sup>c</sup>	0	0	0.76 <sup>c</sup>
2	30	[-114; 174]		-0.2	[-0.7; 0.4]		-33	[-158; 93]		0.0	[-0.5; 0.4]	
3	-80	[-229; 70]		-0.1	[-0.7; 0.5]		-44	[-189; 100]		0.2	[-0.4; 0.8]	
Ln(MiBP)	-60	[-125; 5]	0.14 <sup>d</sup>	-0.2	[-0.5; 0.0]	0.98 <sup>d</sup>	-29	[-99; 42]	0.61 <sup>d</sup>	-0.1	[-0.3; 0.2]	0.47 <sup>d</sup>
<b>MCPP</b>												
Tertile 1	0	0	0.10 <sup>c</sup>	0	0	0.23 <sup>c</sup>	0	0	0.24 <sup>c</sup>	0	0	0.51 <sup>c</sup>
2	-159	[-303; -15]		-0.5	[-1.0; 0.1]		-101	[-234; -31]		-0.3	[-0.7; 0.2]	
3	-104	[-252; 43]		-0.4	[-1.0; 0.2]		-13	[-155; 129]		-0.3	[-0.9; 0.3]	
Ln(MCPP)	-27	[-92; 37]	0.59 <sup>d</sup>	-0.1	[-0.4; 0.1]	0.49 <sup>d</sup>	-9	[-66; 49]	0.76 <sup>d</sup>	-0.1	[-0.3; 0.1]	0.47 <sup>d</sup>
<b>MBzP</b>												
Tertile 1	0	0	0.67 <sup>c</sup>	0	0	0.32 <sup>c</sup>	0	0	0.58 <sup>c</sup>	0	0	0.34 <sup>c</sup>
2	31	[-120; 182]		-0.1	[-0.7; 0.5]		75	[-66; 216]		-0.3	[-0.8; 0.2]	
3	-30	[-198; 139]		-0.4	[-1.1; 0.2]		44	[-104; 192]		0.0	[-0.6; 0.7]	
Ln(MBzP)	-29	[-82; 24]	0.47 <sup>d</sup>	-0.1	[-0.3; 0.1]	0.13 <sup>d</sup>	-12	[-57; 32]	0.74 <sup>d</sup>	0.0	[-0.2; 0.2]	0.66 <sup>d</sup>
<b>MEHP</b>												
Tertile 1	0	0	0.56 <sup>c</sup>	0	0	0.60 <sup>c</sup>	0	0	0.11 <sup>c</sup>	0	0	0.34 <sup>c</sup>
2	-76	[-213; 62]		-0.3	[0.8; 0.3]		-124	[-258; 10]		-0.2	[-0.7; 0.3]	
3	-51	[-195; 92]		-0.1	[-0.7; 0.4]		-10	[-176; 155]		0.2	[-0.3; 0.8]	
Ln(MEHP)	-17	[-72; 38]	0.71 <sup>d</sup>	0.0	[-0.2; 0.2]	0.87 <sup>d</sup>	11	[-53; 75]	0.78 <sup>d</sup>	0.1	[-0.1; 0.3]	0.23 <sup>d</sup>

Supplemental Material, Table 2 (continued)

Analyte (ug/L)	Control group only (malformation cases excluded) <sup>a</sup>						Non-standardized biomarker concentrations <sup>b</sup>					
	Change in birthweight			Change in head circumference			Change in birthweight			Change in head circumference		
	β (g)	95% CI	p	β (cm)	95% CI	p	β (g)	95% CI	p	β (cm)	95% CI	p
<b>MEOHP</b>												
Tertile 1	0	0	0.95 <sup>c</sup>	0	0	0.36 <sup>c</sup>	0	0	0.44 <sup>c</sup>	0	0	0.06 <sup>c</sup>
2	10	[-130; 151]		-0.2	[-0.3; 0.8]		-84	[-223; 56]		-0.6	[-1.1; -0.1]	
3	-12	[-154; 131]		-0.1	[-0.7; 0.4]		-86	[-248; 76]		-0.4	[-1.1; 0.3]	
Ln(MEOHP)	-19	[-78; 39]	0.81 <sup>d</sup>	-0.1	[-0.3; 0.2]	0.38 <sup>d</sup>	15	[-49; 80]	0.41 <sup>d</sup>	0.0	[-0.2; 0.3]	0.55 <sup>d</sup>
<b>MEHHP</b>												
Tertile 1	0	0	0.80 <sup>c</sup>	0	0	0.60 <sup>c</sup>	0	0	0.19 <sup>c</sup>	0	0	0.87 <sup>c</sup>
2	-10	[-151; 131]		0.1	[-0.5; 0.6]		-128	[-275; 20]		-0.1	[-0.6; 0.4]	
3	-45	[-189; 99]		-0.2	[-0.7; 0.4]		-25	[-181; 131]		-0.1	[-0.7; 0.5]	
Ln(MEHHP)	-19	[-77; 38]	0.50 <sup>d</sup>	-0.1	[-0.3; 0.2]	0.36 <sup>d</sup>	10	[-51; 71]	0.80 <sup>d</sup>	0.0	[-0.2; 0.2]	0.89 <sup>d</sup>
<b>MECPP</b>												
Tertile 1	0	0	0.53 <sup>c</sup>	0	0	0.99 <sup>c</sup>	0	0	0.73 <sup>c</sup>	0	0	0.64 <sup>c</sup>
2	-79	[-220; 61]		0.0	[-0.5; 0.6]		-51	[-187; 84]		-0.2	[-0.8; 0.3]	
3	-38	[-184; 107]		0.0	[-0.5; 0.6]		-50	[-213; 113]		0.0	[-0.6; 0.5]	
Ln(MECP)	-23	[-88; 42]	0.92 <sup>d</sup>	-0.1	[-0.3; 0.2]	0.90 <sup>d</sup>	16	[-57; 88]	0.66 <sup>d</sup>	0.1	[-0.2; 0.3]	0.79 <sup>d</sup>
<b>MCOP</b>												
Tertile 1	0	0	0.65 <sup>c</sup>	0	0	0.94 <sup>c</sup>	0	0	0.16 <sup>c</sup>	0	0	0.49 <sup>c</sup>
2	-68	[-213; 77]		-0.1	[-0.6; 0.5]		-106	[-251; 38]		0.0	[-0.5; 0.5]	
3	-56	[-214; 102]		0.0	[-0.6; 0.6]		-1	[-161; 160]		0.3	[-0.3; 0.8]	
Ln(MCOP)	-32	[-94; 29]	0.65 <sup>d</sup>	0.0	[-0.2; 0.3]	0.88 <sup>d</sup>	12	[-55; 79]	0.55 <sup>d</sup>	0.1	[-0.1; 0.3]	0.28 <sup>d</sup>
<b>MCNP</b>												
Tertile 1	0	0	0.92 <sup>c</sup>	0	0	0.86 <sup>c</sup>	0	0	0.28 <sup>c</sup>	0	0	0.24 <sup>c</sup>
2	-13	[-153; 127]		0.1	[-0.5; 0.6]		-64	[-204; 77]		-0.4	[-0.9; 0.1]	
3	-28	[-170; 113]		-0.1	[-0.6; 0.5]		46	[-109; 202]		0.2	[-0.9; 0.4]	
Ln(MCNP)	-14	[-71; 43]	0.70 <sup>d</sup>	-0.1	[-0.3; 0.1]	0.70 <sup>d</sup>	12	[-51; 75]	0.44 <sup>d</sup>	-0.1	[-0.3; 0.2]	0.57 <sup>d</sup>
<b>DEHP (μmol/L)</b>												
Tertile 1	0	0	0.92 <sup>c</sup>	0	0	0.66 <sup>c</sup>	0	0	0.60 <sup>c</sup>	0	0	0.67 <sup>c</sup>
2	-30	[-169; 110]		0.2	[-0.3; 0.7]		-71	[-209; 67]		-0.2	[-0.8; 0.3]	
3	-19	[-164; 126]		0.0	[-0.3; 0.7]		-34	[-190; 122]		-0.1	[-0.6; 0.5]	
Ln(DEHP)	-21	[-83; 40]	0.89 <sup>d</sup>	-0.1	[-0.3; 0.2]	0.75 <sup>d</sup>	15	[-53; 84]	0.89 <sup>d</sup>	0.0	[-0.2; 0.3]	0.98 <sup>d</sup>

**Supplemental Material, Table 2 (continued)**

Analyte (ug/L)	Control group only (malformation cases excluded) <sup>a</sup>						Non-standardized biomarker concentrations <sup>b</sup>					
	Change in birthweight			Change in head circumference			Change in birthweight			Change in head circumference		
	β (g)	95% CI	p	β (cm)	95% CI	p	β (g)	95% CI	p	β (cm)	95% CI	p
∑LMW (μmol/L)												
Tertile 1	0	0	0.51 <sup>c</sup>	0	0	0.24 <sup>c</sup>	0	0	0.61 <sup>c</sup>	0	0	0.63 <sup>c</sup>
2	-2	[-151; 146]		0.5	[-0.1; 1.0]		34	[-101; 167]		-0.1	[-0.6; 0.4]	
3	-76	[-238; 86]		0.4	[-0.2; 1.0]		-36	[-183; 111]		0.2	[-0.4; 0.8]	
Ln(∑LMW)	-41	[-114; 33]	0.26 <sup>d</sup>	-0.1	[-0.4; 0.2]	0.57 <sup>d</sup>	-5	[-72; 61]	0.50 <sup>d</sup>	-0.1	[-0.3; 0.2]	0.44 <sup>d</sup>
∑HMW (μmol/L)												
Tertile 1	0	0	0.84 <sup>c</sup>	0	0	0.97 <sup>c</sup>	0	0	0.12 <sup>c</sup>	0	0	0.37 <sup>c</sup>
2	-42	[-185; 101]		0.1	[-0.5; 0.6]		-141	[-281; -1]		-0.2	[-0.8; 0.3]	
3	-24	[-182; 133]		0.0	[-0.6; 0.6]		-56	[-213; 101]		0.1	[-0.4; 0.7]	
Ln(∑HMW)	-34	[-98; 31]	0.93 <sup>d</sup>	-0.1	[-0.3; 0.2]	0.99 <sup>d</sup>	9	[-60; 79]	0.84 <sup>d</sup>	0.1	[-0.2; 0.3]	0.40 <sup>d</sup>

Abbreviations: MEP: monoethyl phthalate, MBP: mono-n-butyl phthalate, MiBP: mono-isobutyl phthalate, MBzP: monobenzyl phthalate, MCP: mono(3-carboxypropyl) phthalate, MEHP: mono(2-ethylhexyl) phthalate, MEHHP: mono(2-ethyl-5-hydroxyhexyl) phthalate, MEOHP: mono(2-ethyl-5-oxohexyl) phthalate, MECPP: mono(2-ethyl-5-carboxypentyl) phthalate, MCOP: monocarboxy-isooctyl phthalate, MCNP: monocarboxyisononyl phthalate, DEHP: molecular sum of 4 metabolites of di(2-ethylhexyl) phthalate, ∑LMW: molecular sum of low molecular weight phthalates, ∑HMW: molecular sum of high molecular weight phthalates. Adjustment factors were maternal pre-pregnancy weight and height, maternal smoking, maternal education level, parity, recruitment center and creatinine level. Models for head circumference were further adjusted for mode of delivery (cesarean section yes/no).

<sup>a</sup> Non-weighted analyses restricted to controls, concentrations were standardized for conditions of sampling; the limits of exposure tertiles were the same as those defined in the whole population (as in table 4); n=215.

<sup>b</sup> Weighted analyses in the whole population, non-standardized concentrations; n=287.

<sup>c</sup> p-values of heterogeneity test.

<sup>d</sup> p-values of monotonic trend test.

Results of the sensitivity analyses for birth length are available from the corresponding author.